

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BATTLE MOUNTAIN DISTRICT/MOUNT LEWIS FIELD OFFICE**

DOI-BLM-NV-B010-2015-0005-EA

FINDING OF NO SIGNIFICANT IMPACT

I have reviewed Environmental Assessment (EA) DOI-BLM-NV-B010-2015-0005-EA dated December 2014. After consideration of the environmental effects as described in the EA (and incorporated herein), I have determined that the Proposed Action with the Project design features identified in the EA will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as described in 40 Code of Federal Regulations (CFR) 1508.27. Therefore, preparation of an Environmental Impact Statement (EIS) is not required per section 102(2)(c) of the National Environmental Policy Act (NEPA).

DOI-BLM-NV-B010-2015-0005-EA has been reviewed through the interdisciplinary team process, as well as being sent to the Nevada State Clearinghouse and the public for a 30-day comment period.

After consideration of the environmental effects of the Bureau of Land Management's (BLM) preferred alternative (the Proposed Action) described in the EA and the supporting baseline documentation, it has been determined that the Proposed Action identified in the EA is not a major Federal action and will not significantly affect the quality of the human environment.

It has been determined that the Proposed Action is in conformance with the approved Shoshone-Eureka Resource Management Plan and its amendments, and is consistent with the plans and policies of neighboring local, county, state, tribal, and federal agencies and governments.

Context

The BLM has prepared an Environmental Assessment (EA), DOI-BLM-NV-B010-2015-0005-EA that analyzes the affected environment, environmental impacts, and identifies environmental protection measures associated with the Barrick Gold Exploration Inc. (Barrick) *Horse Canyon/Cortez Unified Exploration Project Plan of Operations Agency-Requested Modifications NVN-066621 (13-1A) and Reclamation Permit No. 159* (Modification Plan) which was received on September 18, 2013, and the *Horse Canyon/Cortez Unified Exploration Horse Canyon/Cortez Unified Exploration Project Addendum to Plan of Operations Modification NVN-066621 (13-1A) and Reclamation Permit No. 159* (Addendum Plan) which was received on October 14, 2013 for the Horse Canyon/Cortez Unified Exploration Project (Project). The Modification Plan and the Addendum Plan were submitted in accordance with the BLM Surface Management Regulations 43 Code of Federal Regulations (CFR) 3809, as amended. The Modification Plan has been assigned BLM case file number NVN-066621 (13-1A), and the Addendum Plan has been assigned case file number NVN-066621 (14-1A). The Project Area includes approximately 22,307 acres; there are approximately 21,079 acres of public land. The Project is located within

all or portions of Township (T) 26 North (N), Range (R) 47 East (E) (sections 1, 2, 3, 11, and 12); T26N, R48E (sections 1-17, 20-29, and 32-36); and T27N, R48E (sections 14, 15, 20, 22, 23, 26-29, and 32-36), Mount Diablo Base and Meridian (MDB&M), Eureka and Lander Counties, Nevada (Project Area).

For a complete description of the proposed Project, please refer to the EA, Section 2.1, Proposed Action.

Pursuant to the NEPA and the Council on Environmental Quality regulations on implementing NEPA, the EA identifies, describes, and evaluates resource protection measures that would mitigate the possible impacts of the proposed Project. The short and long-term impacts as disclosed in the EA are not considered to be significant to the human environment. The short-term impacts from implementation of the Proposed Action are local; they are not regional or national in nature. The long-term impacts resulting from the Proposed Action would be mitigated by concurrent reclamation during the life of the Project and meeting all reclamation requirements prior to closure of the Project.

Intensity

1. Impacts that may be both beneficial and adverse.

Potential impacts to the environment as identified in Chapter 3 of the EA include the following: potential for spread of noxious weeds and invasive, non-native species within the Project Area; temporary vegetation loss; temporary wildlife habitat loss and displacement due to Project activities and human presence; potential release of petroleum products and drilling fluids, and impacts to special status species/habitat. Many of these impacts would be minimized by the Environmental Protection Measures (EPMs) included in Section 2.2.3 of the EA as well as by the concurrent reclamation and other measures committed to by Barrick.

Barrick would adhere to EPMs as established by the BLM for Greater sage-grouse lek/strutting grounds and for known nesting and brood rearing areas. Noise generated by exploration activities would not increase ambient levels by 10 A-weighted decibels (dBA) at active leks based upon BLM stipulations (BLM 2014c). This EPM is applicable to potentially affected active leks within four miles of the Project, which currently include the Horse Creek 01 Lek and the New Cortez – Grass Valley Lek. The New Brock Canyon Lek is excluded from the EPM due to topographical features which reduce or eliminate noise generated from the Proposed Action. This EPM is subject to review by a BLM biologist and may be adjusted based on annual surveys of lek activity. Upon identifying any previously unknown Greater sage-grouse lek/strutting ground or nesting or brood rearing area, Barrick would immediately notify the BLM.

To prevent effects at leks from potential increases in noise, Barrick would implement sound reduction measures which may include sound modelling as per BLM protocol (BLM 2014c), placement of a sound barrier at drill rigs, or restriction of drilling operations during seasonal and daily timing periods. If the sound modeling shows no Projected increase in noise levels above 10 dBA, no additional measures are needed. If the sound modeling shows an increase in noise levels above 10 dBA or if no modeling is conducted, Barrick would install sound barriers (likely hay

bales or similar material) at the drill rig or would adhere to seasonal and time operational restrictions. The restrictions would be in place from March 1 through May 15 from 4:00 a.m. to 10:00 a.m. (BLM 2014c).

Barrick would provide a Work Plan for future surface disturbance locations to the BLM. BLM may conduct field verification of Greater sage-grouse habitat in areas of proposed surface disturbance to further define habitat impacts.

As outlined in Sections 2.2.3 and 3.9.3.1 of the EA, in order to reduce impacts due to disturbance within Greater sage-grouse habitat, Barrick would provide one or more of the following EPMs in coordination with the BLM:

- Pinyon-juniper removal
- Install Greater sage-grouse flight deterrents
- Exclosures surrounding springs, meadows, and riparian areas
- Payment for Greater sage-grouse mitigation (as outlined below)

Barrick would implement the EPMs within two years of the Decision Record for the Modification and Addendum; an extension of the timeframe for implementing the EPM may be authorized by BLM. Greater sage-grouse EPMs completed would be reported in the annual disturbance summary report, which is provided to the BLM and NDEP by April 15.

Use of hand-thinning methods (i.e. chainsaw, lop and scatter of slash, etc.) to remove pinyon and juniper trees in areas that are determined to be actively encroaching into Greater sage-grouse habitat would be implemented. Pinyon-juniper would be removed from three acres of encroachment areas for every one acre of Proposed Project disturbance. Pinyon-juniper treatment would be prioritized to occur within the Project boundary, and focus on Phase I and Phase II pinyon-juniper conditions. Treatment activities would not occur within a four-mile buffer from active leks from March 1 through June 30 to minimize the potential for impacts to breeding and nesting Greater sage-grouse. Surveys for migratory birds would be required between March 1 and July 31.

To minimize potential impacts to cultural resources as a result of these measures, several additional actions would be undertaken. As specific treatment sites are identified, a BLM staff archaeologist or BLM permitted archaeologist would evaluate the potential of the area for cultural resources, and would undertake avoidance measures as needed in consultation with the BLM. To reduce the risk of unauthorized collection, field crews would be instructed by an agency archaeologist or BLM permitted archaeologist regarding the importance of cultural resources and the possible penalties under the Archaeological Resources Protection Act for the destruction of archaeological resources. In order to decrease the risk of inadvertent damage to fragile remains, crews would also be instructed to recognize wood and brush cultural resources.

Greater sage-grouse flight deterrents (fence markers) would be attached to fences within Greater sage-grouse habitat at a BLM-determined ratio of number of deterrents for every acre of

disturbance. Preferred locations of flight deterrents include fencing near leks and associated buffer areas.

Exclosures would be constructed surrounding springs, meadows, and riparian areas identified by BLM as important Greater sage-grouse habitat.

As outlined in the Memorandum of Understanding (MOU) *Regarding the Establishment of a Partnership for the Conservation and Protection of the Greater sage-grouse and Greater sage-grouse Habitat* (BLM et al. 2013), payment may be made into a Greater sage-grouse mitigation bank account or other program in an amount equal to the cost of satisfying the target mitigation ratios. Costs for making such improvements on private lands would be based on the Nevada Standardized Reclamation Cost Estimator (SRCE) model. The Nevada SRCE would also provide the basis for negotiating costs for public lands including cost of NEPA compliance (BLM et al. 2013).

Where reclaimed areas are found to adequately address some or all of the impacts to Greater sage-grouse habitat, the required habitat improvement acreage may be reduced or credited on a 1 acre to 1 acre ratio as determined by BLM (BLM et al. 2013).

Seventy-one cultural resource inventories have been completed from 1981-2014, resulting in 84 percent coverage of the Project area. These inventories have documented 439 cultural resources, of which 144 resources are eligible, pending eligible, or unevaluated for the National Register of Historic Places (NRHP).

In 1992, the NHPA was amended to allow for properties of traditional religious and cultural importance to an Indian tribe to be determined as eligible for inclusion on the NRHP. Coordination between BLM and local Indian tribes has resulted in the identification of two Properties of Cultural and Religious Importance (PCRIs) in the Project area: Mount Tenabo/White Cliffs and Horse Canyon (BLM 2004c).

Barrick would continue to conduct exploration activities in accordance with all applicable state and federal regulations and the 2005 Programmatic Agreement (PA) among BLM, the State Historic Preservation Office (SHPO), and the Cortez Joint Venture. Before conducting any surface disturbing activities, Barrick would submit a map, acceptable to the BLM, showing the location of proposed activity. For areas that previously have been surveyed at the Class III level, BLM would then determine which cultural sites need to be monitored and establish an exclusion zone around each site eligible for the NRHP.

For areas that have not been surveyed at a Class III level, BLM would determine the Area of Potential Effect and whether a Class III survey is necessary. If a Class III survey is required, Barrick would retain a BLM permitted archaeologist to undertake the inventory. BLM would also select a Native American observer from a list provided by the Te-Moak Tribe of Western Shoshone to accompany the archaeologist during the inventory to provide information and/or recommendations to the BLM. If a tribal observer is not available upon three days' notice, BLM may select another qualified Native American observer or waive the requirement if none is available within a reasonable period. The archaeologist would submit a report that adheres to the BLM's Cultural Resource Inventory Guidelines documenting the results of the inventory.

All documented sites would be protected from surface disturbing activities by an exclusion zone determined by a BLM archaeologist until the BLM assesses whether the site is eligible for listing on the NRHP. If the BLM determines, in consultation with SHPO, that such site is or may be eligible for the NRHP, Barrick would not conduct any surface disturbing activities within the exclusion zone without further authorization from BLM, which may require further environmental and/or cultural analyses. If the site is determined not to be eligible, or BLM determines that existing cultural surveys are sufficient to conclude that no eligible sites exist, Barrick may conduct surface disturbing activities upon notification by the BLM.

If Barrick discovers previously unknown cultural resources while undertaking exploration activities, Barrick would immediately cease any surface disturbing activity within 100 meters/330 feet of the discovery and notify the BLM. If the BLM determines, in consultation with SHPO, that the site is or may be eligible for the NRHP, a BLM archaeologist would determine an exclusion zone adequate to protect the resource. Barrick would not conduct any surface disturbing activities within this exclusion zone without further authorization from the BLM, which may require further environmental and/or cultural analyses. If the site is determined not to be eligible, Barrick may resume surface disturbing activities upon notification by the BLM.

Barrick's employees and contractors would receive training on the potential for cultural resources and the procedures required by Barrick to avoid disturbing, altering, or destroying any remains or any historical or archaeological site, structure, building, or object on federal land. If exploration activities uncover human remains, Barrick would immediately cease all earth disturbing activities within 100 meters/330 feet of the discovery and notify the BLM and county law enforcement so that BLM and/or law enforcement can ensure compliance with all applicable laws regarding such discovery.

Before conducting any activity in the PCRI areas, Barrick would notify the BLM of the proposed activity so that the BLM may establish exclusion zones as necessary to protect the features identified as contributing elements in the April 19, 2004 eligibility determinations for the PCRI areas. Barrick would not conduct any activity within such exclusion zones without further authorization from the BLM, which may require further environmental and/or cultural analyses. For any activity conducted inside the PCRI areas, but outside of the exclusion zones, Barrick would arrange for a BLM qualified archaeologist and a Native American observer (as provided above) to be on site during new surface disturbing activity to ensure that contributing elements are not adversely affected by the operations.

Travel on dirt roads and drilling within the Project Area have the potential to create fugitive dust and vehicle emissions. Fugitive dust would be controlled by minimizing surface disturbance and utilization of other EPMs described in Chapter 2 of the EA. The potential impacts would be temporary and would cease upon completion of the Project and successful revegetation of the surface disturbance.

The EA addresses visual resources in Chapter 3 of the EA. The impacts to visual resources by the proposed action would be short term. Successful reclamation of the site would minimize the linear contrasts with the natural landscapes caused by drill roads. The Project Area is located in

areas classified as VRM Class III and Class IV and the Project meets all of the requirements associated with those classifications.

Impacts that would be avoided or minimized by operating and reclamation measures committed to by Barrick are presented in Chapter 2 and by the BLM operating and reclamation measures. Reclamation and revegetation of the Project disturbance would gradually reestablish soils, vegetative cover and wildlife habitat. None of the environmental impacts disclosed above and discussed in detail in Chapter 3 of the EA are considered significant.

Reclamation would be completed to the standards described in 43 CFR 3809.420 and Nevada Administrative Code (NAC) 519A. Reclamation would meet its objectives as outlined in the United States Department of the Interior Solid Minerals Reclamation Handbook #H-3042-1, Surface Management of Mining Operations Handbook H-3809-1, and revegetation success standards per BLM/Nevada Division of Environmental Protection (NDEP) "Revised Guidelines for Successful Mining and Exploration Revegetation."

The No Action Alternative represents no change to the current management direction. Under the No Action Alternative, BLM would not grant approval of the Plan Modification and Addendum. Exploration and reclamation activities would continue in open and active areas only. The No Action Alternative incorporates the Applicant-committed EPMs identified in the Project II EA (BLM 2004a), and superseded by the 2011 Addendum to Project II DR/FONSI (BLM 2011a) and August 2012 DR (BLM 2012a). These measures are the Conditions of Approval in the BLM Plan of Operations Approval, May 2011, which incorporates by reference EA No. NV063-EA04-61 and the Addendum to the EA (November 2010), with further defined construction design and operational measures for drilling sumps as outlined in the Barrick report dated December 3, 2012.

2. The degree to which the proposed action affects public health and safety.

The effects of the Proposed Action on both employees and public health and safety are considered to be positive. Compliance by Barrick with both BLM and NDEP mining regulations, along with compliance with the Mine Safety and Health Administration's regulations would ensure employee and public safety.

Through adherence to EPMs, and Best Management Practices (BMPs), the Proposed Action would not result in potentially substantial or adverse impacts to public health and safety. Public safety would be maintained throughout the life of the Project. Barrick would commit to the following EPMs to insure public health and safety:

- All equipment and other facilities would be maintained in a safe and orderly manner.
- Personnel working at the site would keep the occasional public out of operational areas.
- All sumps and other small excavations that pose a hazard or nuisance to the public, wildlife, or livestock would be adequately fenced to preclude access to them.
- The Project would hire a certified commercial applicator for the application of pesticides on the Project site. for weed control. Existing roads within the Project boundary that are disturbed during the proposed action would be reclaimed, by Barrick, to their pre-disturbance condition in order to provide continued public access through the area.

- Unpaved roads are well maintained and accommodate two-lane traffic to and from the Project Area.
- Trash and regulated wastes would be contained and hauled to an approved landfill.
- Portable chemical toilets would be used for human waste.
- Drill sites and storage yards would be located off of existing roads.
- Only nontoxic fluids would be used in the drilling process.
- Emissions of fugitive dust from disturbed surfaces would be minimized by utilizing appropriate control measures.
- Speed limits would be enforced.

3. Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The Project Area is located in Eureka and Lander Counties, approximately 35 miles southeast of the community of Battle Mountain, Nevada. There are no park lands, prime farmlands, or wild and scenic rivers in the vicinity.

There are known cultural resources located within the Project Area. All cultural sites will be avoided or addressed as described in the mitigation measures.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The Proposed Action is not expected to have effects on the quality of the human environment that are highly controversial. The parameters of the exploration activities, along with associated reclamation of the drill holes, drill pads and sumps, and roads are well established. The Project Area is isolated from human habitations. Except for mineral exploration and recreation uses, the Project Area is typically uninhabited.

The reclamation should return the land to its pre-exploration uses of livestock grazing, mineral exploration, dispersed recreation, and wildlife habitat.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no known effects of the Proposed Action identified in the EA that are considered highly uncertain or involve unique or unknown risks. Exploration activities similar to what has been included in the Proposed Action have been conducted numerous times over many years on BLM-administered land and the effects are well understood. This is demonstrated through the effects analysis in Chapter 3 of the EA.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Proposed Action will not establish a precedent for future actions with significant effects or represent a decision about a future consideration. Completion of the EA does not establish a

precedent for other assessments or authorization of other exploration Projects including additional actions at the Project Area. Any future Projects within the area or in surrounding areas will be analyzed on their own merits, independent of the actions currently selected.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Direct and indirect impacts of the Proposed Action were analyzed in Chapter 3 (Affected Environment and Environmental Consequences) of the EA. None of the environmental impacts disclosed under item 1 above and discussed in detail in Chapter 3 of the EA are considered significant. Past, present and reasonably foreseeable future actions have been considered in the cumulative impacts analysis within Chapter 3 of the EA. The cumulative impacts analysis examined all of the affected resources and all other appropriate actions within the Cumulative Effects Study Areas and determined that the Proposed Action would not incrementally contribute to any significant impacts. In addition, for any actions that might be proposed in the future, further site-specific environmental analysis, including assessment of cumulative impacts, would be required.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.

The area of potential effect (APE) consists of 22,307 acres and includes the entire Project Area. A total of seventy-one cultural resources inventories have been completed from 1981-2014, resulting in 84 percent coverage of the Project area. These inventories documented 439 cultural resources, of which 144 resources were eligible, pending eligible, or unevaluated for NHRP.

Barrick has committed to avoid all known eligible sites, as described in Chapters 2 and 3 of the EA. Inadvertent discoveries of previously undetected cultural resources would be treated as required under 43 CFR 10.4 and 43 CFR 3908.420(8)(b). Any such discovery would be immediately reported to the authorized BLM officer. All operations in the immediate area of the discovery would be suspended, and the site would be protected until the authorized officer could develop an appropriate plan for management of the resource.

Historic archaeological sites are largely associated with creation of the Cortez Mining District in 1863. The Project area contains what were historically the District's most productive mines, including the Garrison, St. Louis, and Arctic, as well as the ruins of two of the District's mills and the ghost town of Cortez. The hills surrounding the mines have evidence of charcoal production, woodcutting, prospecting, and lime production. Work in the District was performed by various ethnic groups including Chinese, Mexican, and Italian. The historic mining landscape contains 150 years of mining adaptation. Horse Canyon derives from Horse Ranch, a property in the canyon that captured and bred horses for out of state markets in the 1880s.

The Cortez Mining District has been proposed as a Historic District for the NRHP. The Cortez Mining District is eligible for inclusion under criterion (a): its association with events that have made a significant contribution to broad patterns of U.S. history, including settlement and ethnic heritage; criterion (b): its association with people that have made a significant contribution to

broad patterns of history, specifically Simeon Wenban (Wenban was one of the original prospectors and played the most important role in developing the mines of the Cortez Mining District); criterion (c): it is representative of a significant and distinguishable entity whose components may lack individual distinction; and criterion (d): it has yielded or is likely to yield information important to U.S. history. The Cortez Mining District has several mills representing a nearly complete record of the evolution of precious metal milling technology in the west, and contains archaeological sites that can address topics of landscape transformation, migration and diaspora, and industrial capitalism. The BLM and Nevada SHPO consider the district eligible under all four criteria (BLM 2008c).

If Barrick discovers a vertebrate fossil deposit during surface disturbing activities, Barrick would immediately cease further activities that may affect the deposit and notify the BLM so that the BLM may evaluate the discovery and establish an exclusion zone. Barrick would not undertake any further surface disturbance within the exclusion zone.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973.

The United States Fish and Wildlife Service, the Nevada Natural Heritage Program (NNHP), and Nevada Department of Wildlife (NDOW) were contacted to obtain a list of threatened, endangered, and sensitive species that have the potential to occur within the Project Area. In addition, the BLM Sensitive Species List and Special Status Species lists for the Battle Mountain District were evaluated.

The NNHP database was queried to determine the presence or absence of special status wildlife species in the area of the Proposed Action. Information from the NNHP indicates that no federally threatened or endangered plant or animal species have the potential to occur within the Project Area.

Impacts to special status species or their habitat from the Proposed Action are analyzed in Chapters 3 of the EA. These impacts are expected to not be significant, based on the implementation of the design features and EPMs outlined in Chapter 2.

The action complies with the Endangered Species Act, in that potential effects of this decision on listed species have been analyzed and documented. The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the ESA of 1973, as amended.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Proposed Action will not violate or threaten to violate any federal, state, or local law or requirement imposed for the protection of the environment.



Acting for

3/5/2015

Jon D. Sherve
Acting Field Manager
Mount Lewis Field Office

Date